AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method of automatic navigation assistance for an aircraft, ~~characterized in that~~ comprising the steps of:

~~a capture zone being a zone in which the~~ aircraft ~~can capture~~ capturing a predetermined vertical profile segment aircraft in a capture zone ~~by~~ ;

applying a transition between [[the]] a guidance submode which the aircraft is in and the guidance submode adapted to the following of the vertical profile segment to be captured [[,]] ; and

~~it comprises the step consisting in~~ determining the width of the capture zone as a function of the height h of the vertical profile to be captured and of the speed v which the aircraft has when plumb with this height when the aircraft is not on the profile or at this height when the aircraft is on the profile.

2. (currently amended): The method as claimed in ~~the preceding~~ claim 1, ~~characterized in that~~ wherein the width of the capture zone is determined as a function of the height h and of the square of the speed v.

3. (currently amended): The method as claimed in ~~the preceding~~ claim 1, ~~characterized in that~~ wherein the width of the capture zone is equal to around $2\Delta h$ with

$$\Delta h = h' - h = h_s + \left[h + \frac{v^2}{2g} \right] \frac{1}{K}$$

h' being the height of the upper bound of the capture zone, h_s a safety height, g the terrestrial acceleration and K an adaptation constant.

4. (currently amended): A device [[(100)]] for automatic navigation assistance for an aircraft ~~comprising at least one~~ having a program memory [[(102)]], ~~characterized in that~~ comprising:

the program memory [[(102)]] ~~comprises~~ has a program for computing the width of a capture zone, a capture zone being a zone in which the aircraft can capture a predetermined vertical profile segment by applying a transition between the guidance submode which the aircraft is in and the guidance submode adapted to the following of the profile segment to be captured, the width of the capture zone being calculated as a function of the height h of the vertical profile to be captured and of the speed v which the aircraft has when plumb with this height when the aircraft is not on the profile or at this height when the aircraft is on the profile.

5. (currently amended): The device as claimed in ~~the preceding~~ claim 4, ~~characterized in that~~ wherein the program memory ~~comprises~~ includes a program for computing the width of a capture zone as a function of the height h and of the square of the speed v.

6. (new): The method as claimed in claim 2, wherein the width of the capture zone is equal to around $2\Delta h$ with

$$\Delta h = h' - h = h_s + \left[h + \frac{v^2}{2g} \right] \frac{1}{K}$$

h' being the height of the upper bound of the capture zone, h_s a safety height, g the terrestrial acceleration and K an adaptation constant.